Amendments to the Specification:

Please replace the paragraph starting on page 8, line 2, with the following amended paragraph:

-- In the drawings:

Fig. 1 is a half section showing through the reactor;

Fig. 2a is a sectional view of a left hand side of the reactor taken on the line [[A-A]] II-II in Fig. 1 according to one embodiment of the invention;

Fig. 2b is a sectional view of a right hand side of the reactor taken on the line II-II in Fig. 1 according to another embodiment of the invention; and

Fig. 3 is a side view of the reactor equipped with oblique or spiral arranged ducts.--

Please replace the paragraph starting on page 9, line 15, with the following amended paragraph:

-- Consequently, both cooling of the pressure casing 4 during normal operation and heating, for example in the start-up mode, are possible. Furthermore, the pressure and temperature in the ducts 5 can be regulated in such a way that the temperature of the water does not fall short of the dew points on the inside of the pressure casing 4 and therefore no condensation occurs. The ducts 5 have an annular water supply 8 and an annular water discharge 9. The ducts 5 completely surround or encircle the pressure casing 4 and consist of webs 10 which are welded onto the pressure casing 4 and are closed off by means of semicircular or arcuate segments 11. These arcuate segments 11 may be next to one another, wherein the ducts are in abutment as shown in Fig. 2b on the right side of Figure 2. However, circular spacing may also be arranged between the ducts, the adjacent segments 11 then being arrayed as shown in Fig. 2a on the left side of Figure 2. --